



March 8, 2006

Ms. Arghavan Rashidi-Fard  
Orange County Health Care Agency  
Hazardous Materials Mitigation Section  
1241 East Dyer Road, Suite 120  
Santa Ana, California 92705-5611

**Subject: Submittal of 1<sup>st</sup> Quarter 2006 Groundwater Monitoring and Progress Report**

**Site: Chevron Service Station No. 9-0819  
195 E. 17th Street, Costa Mesa, California  
OCHCA Case No. 98UT93**

Dear Ms. Rashidi-Fard:

On behalf of Chevron Environmental Management Company (CEMC), Science Applications International Corporation (SAIC) has prepared this Quarterly Groundwater Monitoring and Progress Report for the above-referenced site. Work performed for this quarter includes groundwater monitoring by Wayne Perry, Inc. Electronic Deliverable Format (EDF) files have been uploaded to the State Water Resources Board GeoTracker website.

If you have any questions, please contact Mr. Daryl Pessler, the SAIC Project Manager, at (714) 257-6404, or Ms. Natasha Molla, the CEMC Project Manager, at (714) 671-3537.

Respectfully submitted,

**SCIENCE APPLICATIONS INTERNATIONAL CORPORATION**

Loureen Gomez  
Jr. Project Engineer

T. Michael Pendergrass  
Professional Geologist No. 5685



Attachment 1 – 1<sup>st</sup> Quarter 2006 Progress Report  
Attachment 2 – 1<sup>st</sup> Quarter 2006 Groundwater Summary  
Attachment 3 – Tables  
Attachment 4 – Plates  
Attachment 5 – Hydrographs  
Attachment 6 – Groundwater Sampling Procedures and Field Sheets  
Attachment 7 – Laboratory Analyses and Chain of Custody Forms  
Attachment 8 – Disposal Records

cc: Ms. Natasha Molla, CEMC  
SAIC Project File

This report is based upon records and verbal and written information made available to SAIC by CEMC and its subcontractors. Because the investigation consisted of collecting and evaluating a limited supply of information, SAIC may not have identified all potential items of concern and, therefore, SAIC warrants only that the project activities under this contract have been performed within the parameters and scope communicated by CEMC and reflected in the contract. SAIC has made no independent investigations concerning the accuracy or completeness of the information relied upon. This report is intended to be used in its entirety. Taking or using in any way excerpts from this report are not permitted and any party doing so does so at its own risk.

Science Applications International Corporation  
570 W. Central Avenue, Suite A | Brea, California 92821 | [www.saic.com](http://www.saic.com)

**ATTACHMENT 1**

**1<sup>st</sup> QUARTER 2006 PROGRESS REPORT**

**1. SITE INFORMATION**

- Site Case No. 98UT93
- Site Name Chevron Service Station No. 9-0819
- Address 195 E. 17th Street
- City Costa Mesa, California

**2. RESPONSIBLE PARTY INFORMATION**

- Contact Ms. Natasha Molla
- Company Chevron Environmental Management Company
- Address P.O. Box 2292
- City / Zip Brea, California 92822-2292
- Phone 714 – 671-3537

**3. CONSULTANT INFORMATION**

- Contact Mr. Daryl J. Pessler
- Company Science Applications International Corporation
- Address 590 West Central Avenue, Suite I
- City / Zip Brea, California 92821
- Phone 714 – 257-6404

**4. WORK PERFORMED THIS QUARTER**

- Groundwater monitoring

**5. WORK PROPOSED FOR NEXT QUARTER**

- Groundwater monitoring

**6. CURRENT PHASE OF PROJECT (Initial Assessment, Additional Assessment, CAP, Remediation, Post-Remediation Monitoring, etc.):**

- Groundwater monitoring

**7. DESCRIBE CORRECTIVE AND REMEDIAL TECHNIQUES TO BE IMPLEMENTED IN THE FUTURE AND INCLUDE TIME SCHEDULE FOR THE INITIATION OF THE ASSOCIATED ACTIVITIES (NAPL Removal, Pump and Treat, VES, Excavation, etc.):**

- None at this time

**8. CURRENTLY MONITORING (Soil, Groundwater, None):**

- Groundwater

**9. MONITORING FREQUENCY (Quarterly, Monthly, etc.):**

- Quarterly

**10. DESCRIBE CORRECTIVE AND REMEDIAL TECHNIQUES, INCLUDING INVESTIGATIONS, IMPLEMENTED TO DATE WHICH WERE UNDERTAKEN TO DETERMINE THE NATURE AND EXTENT OF SOIL, GROUNDWATER, OR SURFACE WATER CONTAMINATION (NAPL Removal, Pump and Treat, VES, Excavation, etc.):**

- UST removal
- Site assessment
- Additional assessment
- Vapor extraction testing
- Groundwater monitoring

**11. CUMULATIVE SOIL REMOVED TO DATE (cubic yards):**

- Unknown

**12. SOIL REMOVED THIS QUARTER (cubic yards):**

- None

**13. ARE CONTAMINATED SOILS OR LIQUIDS GENERATED FROM INVESTIGATIONS OR CLEANUPS CURRENTLY STORED ON SITE?**

- No
- Date generated N/A
- How much? N/A

## **ATTACHMENT 2**

### **1<sup>st</sup> QUARTER 2006 GROUNDWATER SUMMARY**

## **GROUNDWATER MONITORING SUMMARY**

### **CURRENT FIELD ACTIVITIES**

Groundwater monitoring frequency:	Quarterly
Activity date:	1/17/2006
Field subcontractor:	Wayne Perry, Inc.
Purging method:	Submersible pump
Purging subcontractor:	Wayne Perry, Inc.
Disposal method/facility:	Bulked offsite / US Filter
Gallons of groundwater purged:	96
Number of groundwater wells total:	4
Number of groundwater wells off-site:	0
Number of wells sampled this period:	4
Number of wells with NAPL:	0
Cumulative NAPL recovered to date (gallons):	None
NAPL recovered this quarter (gallons):	None

### **SITE HYDROLOGY**

Average groundwater elevation (of wells gauged):	68.45 feet above mean sea level
Groundwater elevation change from previous quarter:	+0.01 foot
Approximate groundwater flow direction:	West-southwest
Approximate hydraulic gradient:	0.002 ft/ft

### **GROUNDWATER CONDITION**

Maximum benzene concentration:	ND<0.5 µg/L – All wells
Minimum benzene concentration:	ND<0.5 µg/L – All wells
Historical maximum benzene concentration:	4.3 µg/L – MW-11 (2/26/02)
Maximum MtBE concentration:	32 µg/L – MW-13
Minimum MtBE concentration:	7 µg/L – MW-12
Historical maximum MtBE concentration:	3,680 µg/L – MW-11 (2/26/02: 8260)

### **GROUNDWATER TRENDS AND OBSERVATIONS**

- BTEX, ETBE, DIPE, TAME, TBA were not detected in any samples for this quarter.
- All four wells had a significant reduction in MtBE concentrations over the last three quarters that appears to correspond to an increase in groundwater elevations. Maximum concentrations of MtBE were 1,700 µg/L in 2<sup>nd</sup> quarter 2005 and 110 µg/L in 3<sup>rd</sup> quarter 2005. The maximum concentration of MtBE was 32 µg/L this quarter.

## **ATTACHMENT 3**

### **TABLES**

**Table 1. Current Groundwater Analyses and Gauging Results**  
**Chevron Environmental Management Company**  
**Service Station No. 9-0819**  
**195 E. 17th St., Costa Mesa, California**

Well ID	Date Sampled	Top of Casing (feet)	Depth to GW (feet)	GW Elevation (feet)	Depth of Well (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	TBA (µg/L)	Iron (mg/L)	Nitrate NO <sub>3</sub> (mg/L)	Sulfate (mg/L)	DO (mg/L)	ORP (mV)	Comments
MW-10	1/17/2006	100.67	32.30	68.37	43.48	<b>270</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>21</b>	ND<0.5	ND<0.5	ND<0.5	ND<5	<b>0.015 J</b>	<b>2</b>	<b>261</b>	<b>2.13</b>	<b>120</b>	---
MW-11	1/17/2006	100.18	31.75	68.43	44.02	<b>160</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>28</b>	ND<0.5	ND<0.5	ND<0.5	ND<5	<b>0.015 J</b>	ND<0.40	<b>281</b>	<b>2.24</b>	<b>-31</b>	---
MW-12	1/17/2006	100.24	31.77	68.47	44.17	<b>40 J</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>7</b>	ND<0.5	ND<0.5	ND<0.5	ND<5	<b>0.0098 J</b>	<b>2.6</b>	<b>231</b>	<b>2.13</b>	<b>33</b>	---
MW-13	1/17/2006	99.95	31.42	68.53	43.94	<b>77</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>32</b>	ND<0.5	ND<0.5	ND<0.5	ND<5	<b>0.095 J</b>	<b>0.46 J</b>	<b>303</b>	<b>2.51</b>	<b>-93</b>	---
Trip Blank	1/17/2006	---	---	---	---	ND<22	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	---	---	---	---	---	---

**Notes:** µg/L = Micrograms per liter  
ND = Not detected  
TPHg = Total petroleum hydrocarbons as gasoline analyzed by GC/MS (EPA Method 8260B)  
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B.  
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B.  
DIPE = Di-isopropyl-ether analyzed by EPA Method 8260B.  
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B.  
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B.  
J = denotes value between method detection limit and detection limit for reporting purposes  
BTEX analyzed by EPA Method 8260B.



**Table 2. Historical Groundwater Analyses and Gauging Results**  
**Chevron Environmental Management Company**  
**Service Station No. 9-0819**  
**195 E. 17th St., Costa Mesa, California**

Well ID	Date Sampled	Top of Casing (feet)	Depth to GW (feet)	GW Elevation (feet)	Depth of Well (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	TBA (µg/L)	Iron (mg/L)	Nitrate NO3 (mg/L)	Sulfate (mg/L)	DO (mg/L)	DO (%)	ORP (mV)	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	Comments
MW-1	2/11/1993	97.85	34.94	62.91	---	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-1	11/12/1993	97.85	33.97	63.88	45.54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-1	12/30/1993	97.85	33.91	63.94	45.51	ND	ND	2.2	ND	ND	---	---	---	---	---	---	---	---	---	---	---	1.1	2.9	---	---
MW-1	2/21/1994	97.85	33.90	63.95	45.44	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	ND	2.4	---	---
MW-1	5/5/1994	97.85	33.78	64.07	45.40	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	ND	ND	---	---
MW-1	8/12/1994	97.85	33.74	64.11	---	ND	1.5	1.5	0.8	2.2	---	---	---	---	---	---	---	---	---	---	---	2.1	2.4	---	---
MW-1	11/23/1994	97.85	33.73	64.12	45.45	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	0.6	2.9	---	---
MW-1	2/1/1995	97.85	33.67	64.18	45.41	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	ND	ND	ND	---
MW-1	5/1/1995	97.85	33.37	64.48	45.41	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	4.3	1.8	ND	---
MW-1	8/7/1995	97.85	33.23	64.62	45.41	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	2/11/1993	98.01	35.08	62.93	---	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	11/12/1993	98.01	34.09	63.92	43.26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	12/30/1993	98.01	34.05	63.96	42.71	ND	1.9	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	75	3.5	---	---
MW-2	2/21/1994	98.01	34.00	64.01	42.60	ND	8.8	0.4	1.4	ND	---	---	---	---	---	---	---	---	---	---	---	48	4.1	---	---
MW-2	5/5/1994	98.01	33.89	64.12	42.58	ND	14	3.0	20	ND	---	---	---	---	---	---	---	---	---	---	---	49	1.2	---	---
MW-2	8/12/1994	98.01	33.84	64.17	---	500	5.7	5.3	42	10	---	---	---	---	---	---	---	---	---	---	---	79	9.0	---	---
MW-2	11/23/1994	98.01	33.83	64.18	42.53	ND	5.6	1.6	1.7	2.9	---	---	---	---	---	---	---	---	---	---	---	79	8.2	---	---
MW-2	2/1/1995	98.01	33.67	64.34	42.79	720	3.1	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	44	3.2	9.2	---
MW-2	5/1/1995	98.01	33.46	64.55	42.79	1400	ND	1.3	3.1	2.8	---	---	---	---	---	---	---	---	---	---	---	23	2.5	ND	---
MW-2	8/7/1995	98.01	33.13	64.88	42.79	1200	5.7	4.4	1.8	2.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-3	2/11/1993	98.56	35.72	62.84	---	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.6	---	---	---	---	---	---	---	---	---	---	---	95	1.8	---	---
MW-3	11/12/1993	98.56	34.71	63.85	45.18	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-3	12/30/1993	98.56	34.68	63.88	45.18	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	180	5.8	---	---
MW-3	2/21/1994	98.56	34.62	63.94	45.15	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	170	4.4	---	---
MW-3	5/5/1994	98.56	34.52	64.04	45.09	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	250	6.4	---	---
MW-3	8/12/1994	98.56	34.47	64.09	---	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	100	3.2	---	---
MW-3	11/23/1994	98.56	34.48	64.08	42.28	ND	0.4	0.3	ND	ND	---	---	---	---	---	---	---	---	---	---	---	180	4.9	---	---
MW-3	2/1/1995	98.56	33.39	65.17	48.15	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	200	2.4	ND	---
MW-3	5/1/1995	98.56	34.11	64.45	48.15	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	140	2.3	ND	---
MW-3	8/7/1995	98.56	33.78	64.78	48.15	75	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-10	9/15/2001	98.68	32.69	65.99	---	107	ND<1	ND<5	ND<5	ND<5	168	ND<1	ND<1	ND<1	146	---	---	---	---	---	---	26	1.5J	3.4J	---
MW-10	12/17/2001	98.68	32.81	65.87	43.67	706	ND<1	ND<5	ND<5	ND<5	1,020	ND<1	ND<1	8.8	ND<10	---	---	---	---	---	---	---	---	---	
MW-10	2/26/2002	98.68	32.94	65.74	43.63	723	ND<1	ND<5	ND<5	ND<5	473	ND<1	ND<1	3.6	60	---	---	---	---	---	---	---	---	---	
MW-10	5/31/2002	98.68	33.08	65.60	43.65	2,040	ND<1	ND<5	ND<5	ND<5	2,300	ND<1	ND<1	19	1,360	---	---	---	---	---	---	---	---	---	
MW-10	9/11/2002	100.67	33.26	67.41	43.65	727	ND<1	ND<5	ND<5	ND<5	696	ND<1	ND<1	5.2	96	---	---	---	---	---	---	---	---	---	
MW-10	12/5/2002	100.67	33.41	67.26	43.62	1,000	1.5	4.3 J	ND<5	4.5 J	662	ND<1	ND<1	6.1	89	---	---	---	---	---	---	---	---	---	
MW-10	3/11/2003	100.67	33.47	67.20	43.66	340	ND<5	ND<5	ND<5	ND<5	560	ND<10	ND<10	ND<10	ND<50	---	---	---	---	---	---	---	---	---	
MW-10	5/20/2003	100.67	33.34	67.33	43.55	300	ND<4	ND<4	ND<4	ND<4	310	ND<8	ND<8	ND<8	ND<40	0.59	4.1	360	5.33	---	260	---	---	---	
MW-10	8/20/2003	100.67	33.27	67.40	43.59	120	ND<1	ND<1	ND<1	ND<1	51	ND<2	ND<2	ND<2	ND<10	ND<0.040	5.3	350	---	90.4	-65	---	---	---	
MW-10	11/19/2003	100.67	33.33	67.34	43.60	350 J	ND<5	ND<5	ND<5	ND<5	450	ND<10	ND<10	ND<10	ND<50	ND<0.0088	5.1	290	6.25	---	125	---	---	---	
MW-10	2/17/2004	100.67	+	+	+	130	ND<5	ND<5	ND<5	ND<5	36	ND<10	ND<10	ND<10	ND<50	ND<0.0088	3.3	310	+	---	+	---	---	---	
MW-10	5/11/2004	100.67	33.42	67.25	43.50	140	ND<1	ND<1	ND<1	ND<1	27	ND<2	ND<2	ND<2	ND<10	ND<0.0088	1.5	330	9.7	---	220	---	---	---	
MW-10	8/25/2004	100.67	33.62	67.05	43.61	130	ND<1	ND<1	ND<1	ND<1	56	ND<2	ND<2	ND<2	ND<10	ND<0.0088	4.0	300	6.2	---	110	---	---	---	
MW-10	11/8/2004	100.67	33.62	67.05	43.58	140	ND<1	ND<1	ND<1	ND<1	100	ND<2	ND<2	ND<2	ND<10	ND<0.0088	11	320	10.01	---	301	---	---	---	
MW-10	1/31/2005	100.67	33.42	67.25	43.56	190	ND<1	ND<1	ND<1	ND<1	83	ND<2	ND<2	ND<2	ND<10	ND<0.0088	8.9	330	9.41	---	234	---	---	---	
MW-10	4/21/2005	100.67	32.77	67.90	43.55	160	ND<1	ND<1	ND<1	ND<1	83	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	
MW-10	8/1/2005	100.67	32.40	68.27	43.50	210	ND<1	ND<1	ND<1	ND<1	53	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	
MW-10	10/20/2005	100.67	32.30	68.37	43.50	170	ND<0.28	ND<0.36	ND<0.25	ND<0.52	63	ND<0.28	ND<0.25	ND<0.33	ND<3.1	---	---	---	---	---	---	---	---	---	
MW-10	1/17/2006	100.67	32.30	68.37	43.48	270	ND<0.5	ND<0.5	ND<0.5	ND<0.5	21	ND<0.5	ND<0.5	ND<0.5	ND<5	0.015 J	2	261	2.13	---	120	---	---	---	
MW-11	9/15/2001	98.19	32.16	66.03	---	450	1.8	13	ND<5	ND<5	189	ND<1	ND<1	8.1	178	---	---	---	---	---	---	11	3.5J	4.9J	---
MW-11	12/17/2001	98.19	32.27	65.92	44.05	1,260	1.5	20	14	91	1,060	ND<1	ND<1	8.7	ND<10	---	---	---	---	---	---	---	---	---	
MW-11	2/26/2002	98.19	32.40	65.79	44.03	5,000	4.3	24	23	514	3,680	ND<1	ND<1	36.0	633	---	---	---	---	---	---	---	---	---	
MW-11	5/31/2002	98.19	32.55	65.64	44.03	1,390	ND<10	ND<50	ND<50	269	1,080	ND<10	ND<10	15	302	---	---	---	---	---	---	---	---	---	
MW-11	9/11/2002	100.18	32.73	67.45	44.10	396	ND<1	ND<5	ND<5	7.1	83	ND<1	ND<1	ND<1	40	---	---	---	---	---	---	---	---	---	
MW-11	12/5/2002	100.18	32.89	67.29	44.07	718	1.0	ND<5	9.6	38	319	ND<1	ND<1	4.6	154	---	---	---	---	---	---	---	---	---	
MW-11	3/11/2003	100.18	32.94	67.24	44.04	430	ND<4	ND<4	ND<4	ND<4	270	ND<8	ND<8	ND<8	ND<40	---	---	---	---	---	---	---	---	---	
MW-11	5/20/2003	100.18	32.80	67.38	43.98	510	ND<4	ND<4	ND<4	ND<4	340	ND<8	ND<8	ND<8	ND<40	0.18	0.92 J	280	5.64	---	195	---	---	---	
MW-11	8/20/2003	100.18	32.74	67.44	44.01	ND<2,500	ND<50	ND<50	ND<50	ND<50	3,000	ND<100	ND<100	ND<100	ND<500	ND<0.040	ND<1	200	---	96.0	-50	---	---	---	
MW-11	11/19/2003	100.18	32.79	67.39	44.02	1000 J	ND<20	ND<20	ND<20	ND<20	1,400	ND<40	ND<40	ND<40	ND<200	0.092	ND<0.64	200	6.81	---	0	---	---	---	
MW-11	2/17/2004	100.18	+	+	+	980 J	ND<10	ND<10	ND<10	ND<10	1,200	ND<20	ND<20	ND<20	ND<100	ND<0.0088	ND<0.32	200	+	---	+	---	---	---	
MW-11	5/11/2004	100.18	32.88	67.30	43.96	430 J	ND<5	ND<5	ND<5	ND<5	430	ND<10	ND<10	ND<10	86 J	ND<0.0088	ND<0.32	160	10.4	---	284				

**Table 2. Historical Groundwater Analyses and Gauging Results**  
Chevron Environmental Management Company  
Service Station No. 9-0819  
195 E. 17th St., Costa Mesa, California

Well ID	Date Sampled	Top of Casing (feet)	Depth to GW (feet)	GW Elevation (feet)	Depth of Well (feet)	TPH <sub>g</sub> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	TBA (µg/L)	Iron (mg/L)	Nitrate	Sulfate (mg/L)	DO (mg/L)	DO (%)	ORP (mV)	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCLE (ug/L)	Comments
																	NO <sub>3</sub> (mg/L)								
MW-11	8/25/2004	100.18	33.08	67.10	44.04	430 J	ND<5	ND<5	ND<5	ND<5	550	ND<10	ND<10	ND<10	98 J	0.5	0.32 J	160	8.5	---	120	---	---	---	---
MW-11	11/8/2004	100.18	33.08	67.10	44.02	530 J	ND<10	ND<10	ND<10	ND<10	610	ND<20	ND<20	ND<20	110 J	0.33	ND<0.32	180	8.82	---	316	---	---	---	---
MW-11	1/31/2005	100.18	32.88	67.30	44.03	550	ND<1	ND<1	ND<1	ND<1	760	ND<2	ND<2	ND<2	170	0.66	ND<0.64	180	9.21	---	235	---	---	---	---
MW-11	4/21/2005	100.18	32.23	67.95	44.01	720	ND<20	ND<20	ND<20	ND<20	1,700	ND<40	ND<40	ND<40	ND<200	---	---	---	---	---	---	---	---	---	---
MW-11	8/1/2005	100.18	31.87	68.31	44.02	350	ND<1	ND<1	ND<1	ND<1	110	ND<2	ND<2	ND<2	20 J	---	---	---	---	---	---	---	---	---	---
MW-11	10/20/2005	100.18	31.77	68.41	44.01	230	ND<0.28	ND<0.36	ND<0.25	ND<0.52	40	ND<0.28	ND<0.25	ND<0.33	8.9 J	---	---	---	---	---	---	---	---	---	---
MW-11	1/17/2006	100.18	31.75	68.43	44.02	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	28	ND<0.5	ND<0.5	ND<0.5	ND<5	0.015 J	ND<0.40	281	2.24	---	-31	---	---	---	---
MW-12	9/15/2001	98.25	32.19	66.06	---	ND<100	ND<1	ND<5	ND<5	ND<5	18	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	6.2	5.7	ND<5	---
MW-12	12/17/2001	98.25	32.29	65.96	44.22	ND<100	ND<1	ND<5	ND<5	ND<5	76	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
MW-12	2/26/2002	98.25	32.42	65.83	44.22	ND<100	ND<1	ND<5	ND<5	ND<5	69	ND<1	ND<1	ND<1	31	---	---	---	---	---	---	---	---	---	---
MW-12	5/31/2002	98.25	32.57	65.68	44.22	ND<100	ND<1	ND<5	ND<5	ND<5	30	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
MW-12	9/11/2002	100.24	32.75	67.49	44.22	ND<100	ND<1	ND<5	ND<5	ND<5	26	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
MW-12	12/5/2002	100.24	32.90	67.34	44.20	ND<100	ND<1	ND<5	ND<5	ND<5	3.1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
MW-12	3/11/2003	100.24	32.95	67.29	44.21	ND<50	ND<1	ND<1	ND<1	ND<1	3.0 J	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	---
MW-12	5/20/2003	100.24	32.83	67.41	44.14	ND<50	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10	0.049	4.1	260	6.6	---	195	---	---	---	---
MW-12	8/20/2003	100.24	32.77	67.47	44.19	ND<50	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10	ND<0.040	2.3	240	---	93.3	-100	---	---	---	---
MW-12	11/19/2003	100.24	32.82	67.42	44.10	ND<50	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10	0.090	1.3	210	6.87	---	95	---	---	---	---
MW-12	2/17/2004	100.24	+	+	+	ND<50	ND<1	ND<1	ND<1	ND<1	2.9 J	ND<2	ND<2	ND<2	ND<10	ND<0.0088	0.45 J	190	+	---	+	---	---	---	---
MW-12	5/11/2004	100.24	32.90	67.34	44.14	ND<50	ND<1	ND<1	ND<1	ND<1	40	ND<2	ND<2	ND<2	ND<10	ND<0.0088	0.78	200	10.1	---	247	---	---	---	---
MW-12	8/25/2004	100.24	33.11	67.13	44.21	ND<250	ND<5	ND<5	ND<5	ND<5	300	ND<10	ND<10	ND<10	ND<50	0.26	2.5	230	5.6	---	150	---	---	---	---
MW-12	11/8/2004	100.24	33.10	67.14	44.20	240	ND<5	ND<5	ND<5	ND<5	340	ND<10	ND<10	ND<10	ND<50	0.14	2.7	250	10.69	---	349	---	---	---	---
MW-12	1/31/2005	100.24	32.90	67.34	44.19	250	ND<1	ND<1	ND<1	ND<1	430	ND<2	ND<2	ND<2	39	0.23	4.6	240	9.11	---	129	---	---	---	---
MW-12	4/21/2005	100.24	32.24	68.00	44.17	120	ND<1	ND<1	ND<1	ND<1	160	ND<2	ND<2	ND<2	14 J	---	---	---	---	---	---	---	---	---	---
MW-12	8/1/2005	100.24	31.87	68.37	44.20	66 J	ND<1	ND<1	ND<1	ND<1	18	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	---
MW-12	10/20/2005	100.24	31.78	68.46	44.16	61 J	ND<0.28	ND<0.36	ND<0.25	ND<0.52	13	ND<0.28	ND<0.25	ND<0.33	ND<3.1	---	---	---	---	---	---	---	---	---	---
MW-12	1/17/2006	100.24	31.77	68.47	44.17	40 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7	ND<0.5	ND<0.5	ND<0.5	ND<5	0.0098 J	2.6	231	2.13	---	33	---	---	---	---
MW-13	9/15/2001	97.95	31.84	66.11	---	274	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	5.2	12	ND<5	---
MW-13	12/17/2001	97.95	31.94	66.01	43.95	163	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
MW-13	2/26/2002	97.95	32.08	65.87	43.92	112	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
MW-13	5/31/2002	97.95	32.23	65.72	43.90	114	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
MW-13	9/11/2002	99.95	32.41	67.54	43.93	ND<100	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
MW-13	12/5/2002	99.95	32.56	67.39	43.91	279	1.6	ND<5	ND<5	ND<5	52	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
MW-13	3/11/2003	99.95	32.62	67.33	43.83	360	2.8 J	ND<1	10	ND<1	130	ND<2	ND<2	ND<2	18 J	---	---	---	---	---	---	---	---	---	---
MW-13	5/20/2003	99.95	32.48	67.47	43.83	240	1.2 J	ND<1	ND<1	ND<1	67	ND<2	ND<2	ND<2	14 J	6.6	3.8	310	7.69	---	210	---	---	---	---
MW-13	8/20/2003	99.95	32.42	67.53	43.90	89 J	ND<1	ND<1	ND<1	ND<1	30	ND<2	ND<2	ND<2	ND<10	0.32	2.8	320	---	97.2	-75	---	---	---	---
MW-13	11/19/2003	99.95	32.46	67.49	43.93	160	ND<1	ND<1	ND<1	ND<1	120	ND<2	ND<2	ND<2	13 J	2.3	2.4	290	5.57	---	115	---	---	---	---
MW-13	2/17/2004	99.95	+	+	+	400	2.4 J	ND<2	3.9 J	ND<2	380	ND<4	ND<4	ND<4	58	0.064	1.0	240	+	---	+	---	---	---	---
MW-13	5/11/2004	99.95	32.56	67.39	43.88	280 J	ND<5	ND<5	ND<5	ND<5	260	ND<10	ND<10	ND<10	ND<50	ND<0.0088	1.2	230	9.7	---	203	---	---	---	---
MW-13	8/25/2004	99.95	32.77	67.18	43.95	340 J	ND<5	ND<5	ND<5	ND<5	490	ND<10	ND<10	ND<10	83 J	8.8	0.92	240	6.0	---	70	---	---	---	---
MW-13	11/8/2004	99.95	32.76	67.19	43.91	640	ND<5	ND<5	ND<5	ND<5	880	ND<10	ND<10	ND<10	92 J	3.0	1.3	230	9.53	---	-116	---	---	---	---
MW-13	1/31/2005	99.95	32.57	67.38	43.93	430	ND<1	ND<1	ND<1	ND<1	360	ND<2	ND<2	ND<2	72	4.9	2.3	250	9.20	---	-79	---	---	---	---
MW-13	4/21/2005	99.95	31.90	68.05	43.92	140	ND<1	ND<1	ND<1	ND<1	74	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	---
MW-13	8/1/2005	99.95	31.52	68.43	43.96	93 J	ND<1	ND<1	ND<1	ND<1	12	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	---
MW-13	10/20/2005	99.95	31.42	68.53	43.95	64 J	ND<0.28	ND<0.36	ND<0.25	ND<0.52	31	ND<0.28	ND<0.25	ND<0.33	ND<3.1	---	---	---	---	---	---	---	---	---	---
MW-13	1/17/2006	99.95	31.42	68.53	43.94	77	ND<0.5	ND<0.5	ND<0.5	ND<0.5	32	ND<0.5	ND<0.5	ND<0.5	ND<5	0.095 J	0.46 J	303	2.51	---	-93	---	---	---	---
Trip Blank	9/15/2001	---	---	---	---	ND<100	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	ND<5	ND<5	ND<5	---
Trip Blank	12/17/2001	---	---	---	---	ND<100	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	2/26/2002	---	---	---	---	ND<100	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	5/31/2002	---	---	---	---	ND<100	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	9/11/2002	---	---	---	---	ND<100	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	12/5/2002	---	---	---	---	ND<50	ND<1	ND<5	ND<5	ND<5	ND<1	ND<1	ND<1	ND<1	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	3/11/2003	---	---	---	---	ND<50	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	5/20/2003	---	---	---	---	ND<50	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	8/20/2003	---	---	---	---	ND<50	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	11/19/2003	---	---	---	---	ND<50	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	2/17/2004	---	---	---	---	ND<50	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<2	ND<2	ND<10	---	---	---	---	---	---	---	---	---	---
Trip Blank	5/11/2004	---	---	---	---	ND<50	ND<1	ND<1																	

Table 2. Historical Groundwater Analyses and Gauging Results  
Chevron Environmental Management Company  
Service Station No. 9-0819  
195 E. 17th St., Costa Mesa, California

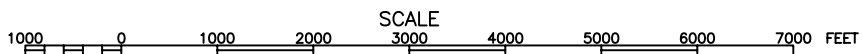
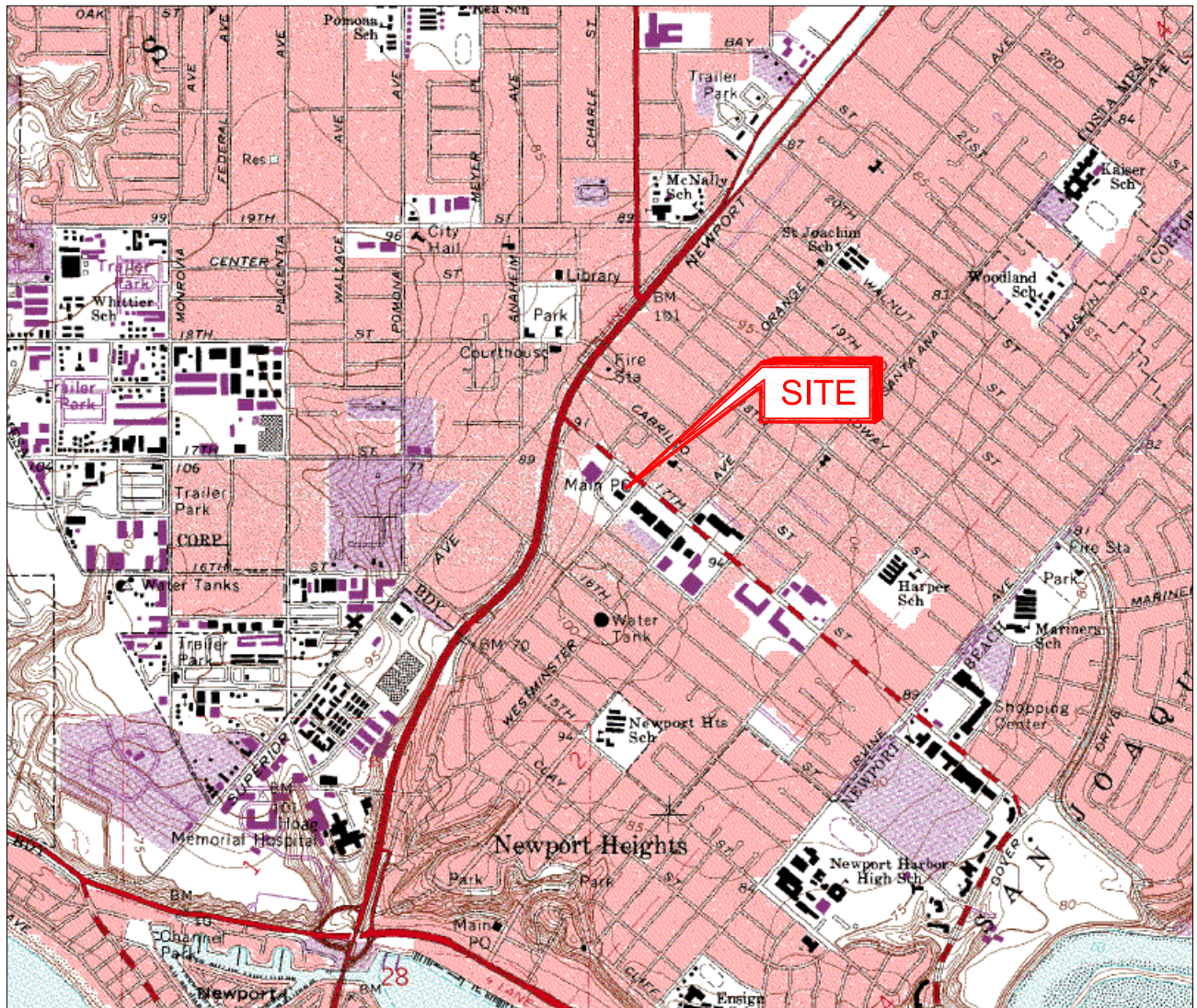
Well ID	Date Sampled	Top of Casing (feet)	Depth to GW (feet)	GW Elevation (feet)	Depth of Well (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	TBA (µg/L)	Iron (mg/L)	Nitrate NO3 (mg/L)	Sulfate (mg/L)	DO (mg/L)	DO (%)	ORP (mV)	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	Comments
Trip Blank	1/17/2006	---	---	---	---	ND<22	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	---	---	---	---	---	---	---	---	---	---

**Notes:** µg/L = Micrograms per liter  
mg/L = Milligrams per liter  
mV = Millivolts  
NAPL = Non-aqueous phase liquid  
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8015B or GC/MS (EPA Method 8260B)  
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260  
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260  
DIPE = Di-isopropyl ether analyzed by EPA Method 8260  
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260  
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260  
DO = Dissolved Oxygen  
ORP = Oxygen Reduction Potential  
PCE = Tetrachloroethene analyzed by EPA Method 8260  
TCE = Trichloroethene analyzed by EPA Method 8260  
cis-1,2-DCE = cis-1,2-Dichloroethene analyzed by EPA Method 8260  
J = denotes value between method detection limit and detection limit for reporting purposes  
BTEX analyzed by EPA Method 8021 prior to 2000, and EPA Method 8260 after unless noted  
\* 4/25/02, wells resurveyed per AB2886 requirements. Historical elevations measured to NGVD29 datum.  
New elevations measured to NAVD88, giving elevations approx. 1.5 to 2.5 feet higher than NGVD29 datum.  
+ Depth to groundwater, groundwater elevation, depth of well, DO and ORP are not recorded due to field notes from this sampling event missing.

## **ATTACHMENT 4**

### **PLATES**





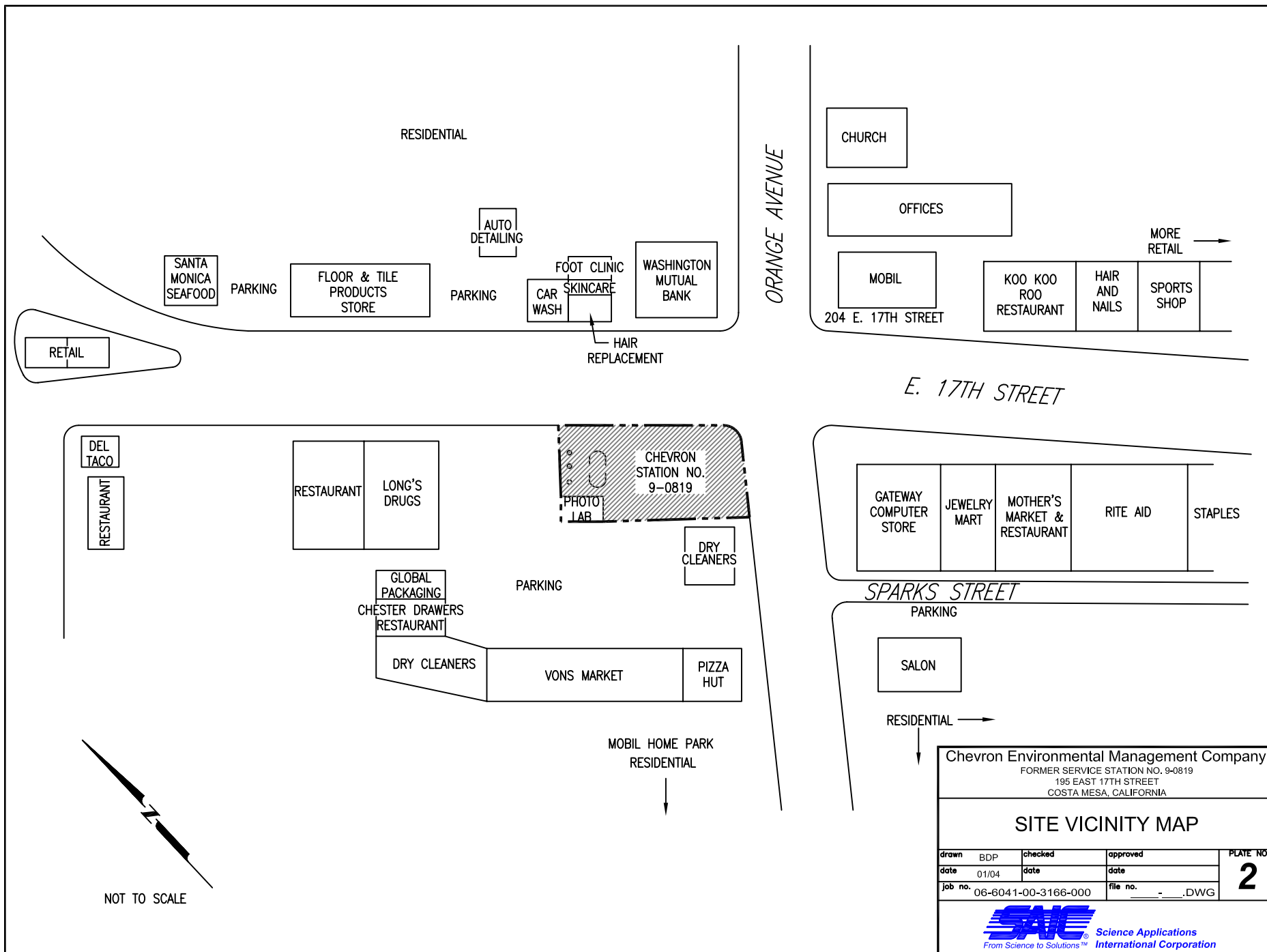
Chevron Environmental Management Company  
FORMER SERVICE STATION NO. 9-0819  
195 EAST 17TH STREET  
COSTA MESA, CALIFORNIA


## SITE LOCATION MAP

drawn	BDP	checked	approved	PLATE NO. <b>1</b>
date	01/04	date	date	
job no.	06-6041-00-7460-000	file no.	_.DWG	

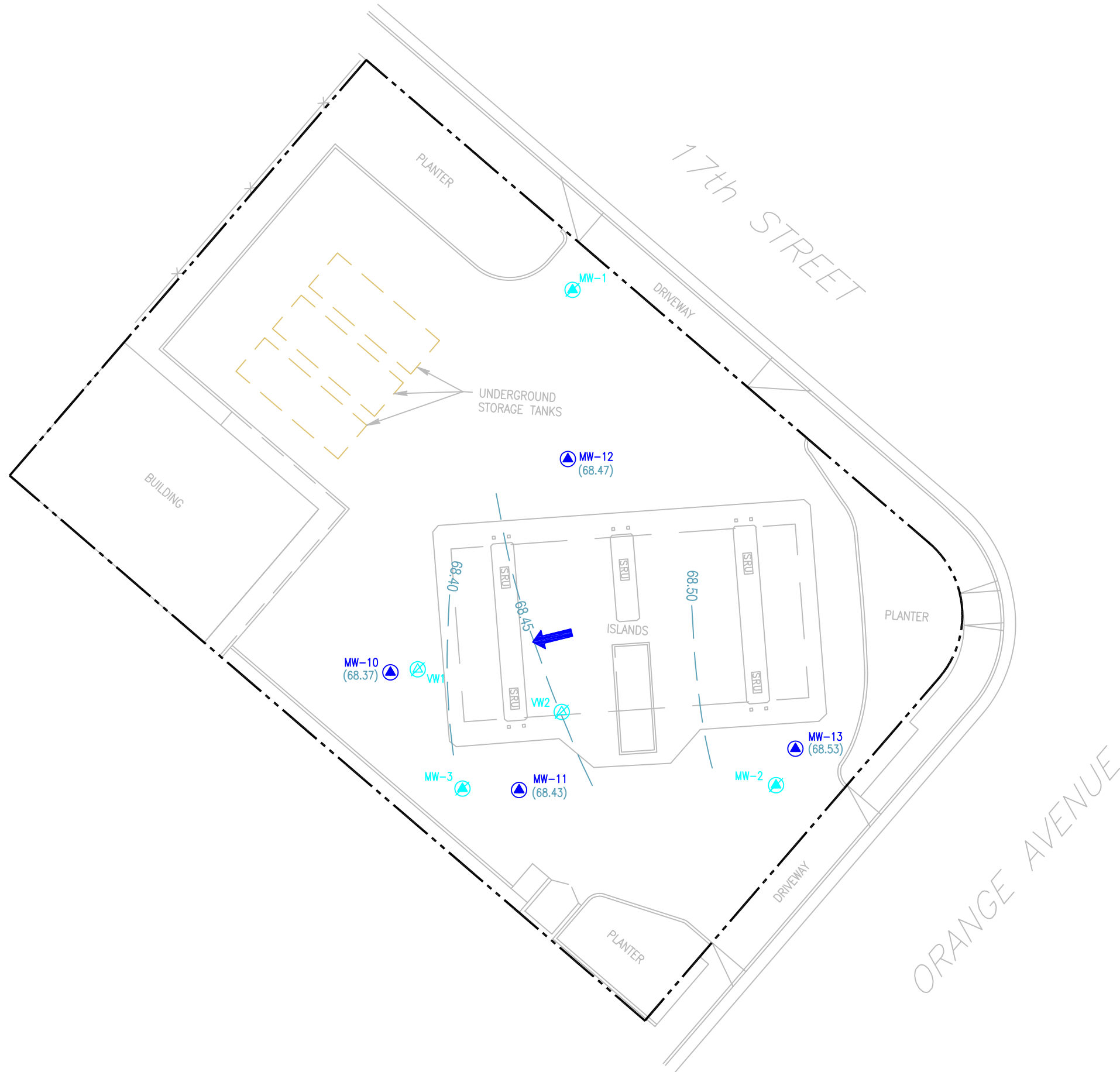
**SAIC** Science Applications  
From Science to Solutions™ International Corporation

REFERENCE: USGS 7.5-MINUTE QUADRANGLE, NEWPORT BEACH, CALIFORNIA (PHOTOREVISED 1981)









Chevron Environmental Management Company FORMER SERVICE STATION NO. 9-0819 195 EAST 17TH STREET COSTA MESA, CALIFORNIA				
<b>SITE VICINITY MAP</b>				
drawn	BDP	checked	approved	PLATE NO.
date	01/04	date	date	<b>2</b>
job no.	06-6041-00-3166-000		file no.	
 <b>Science Applications International Corporation</b> <small>From Science to Solutions™</small>				

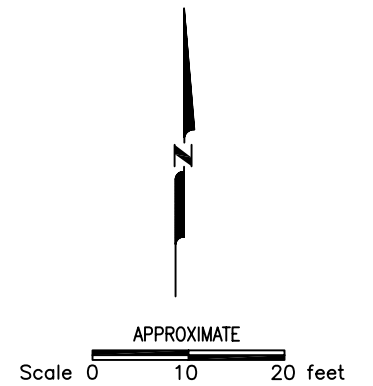
FILE: X:\Drafting\9-0819\2006 QTRLY\00819-GW061.dwg [Model]




#### EXPLANATION

-  GROUNDWATER MONITORING WELL LOCATION
-  DESTROYED BEI MONITORING WELL LOCATION
-  DESTROYED BEI VENT WELL LOCATION
-  GROUNDWATER ELEVATION IN FEET MEAN SEA LEVEL
-  GROUNDWATER ELEVATION CONTOUR IN FEET MEAN SEA LEVEL
-  APPROXIMATE DIRECTION OF GROUNDWATER FLOW (APPROXIMATE HYDRAULIC GRADIENT = 0.002 FT/FT)

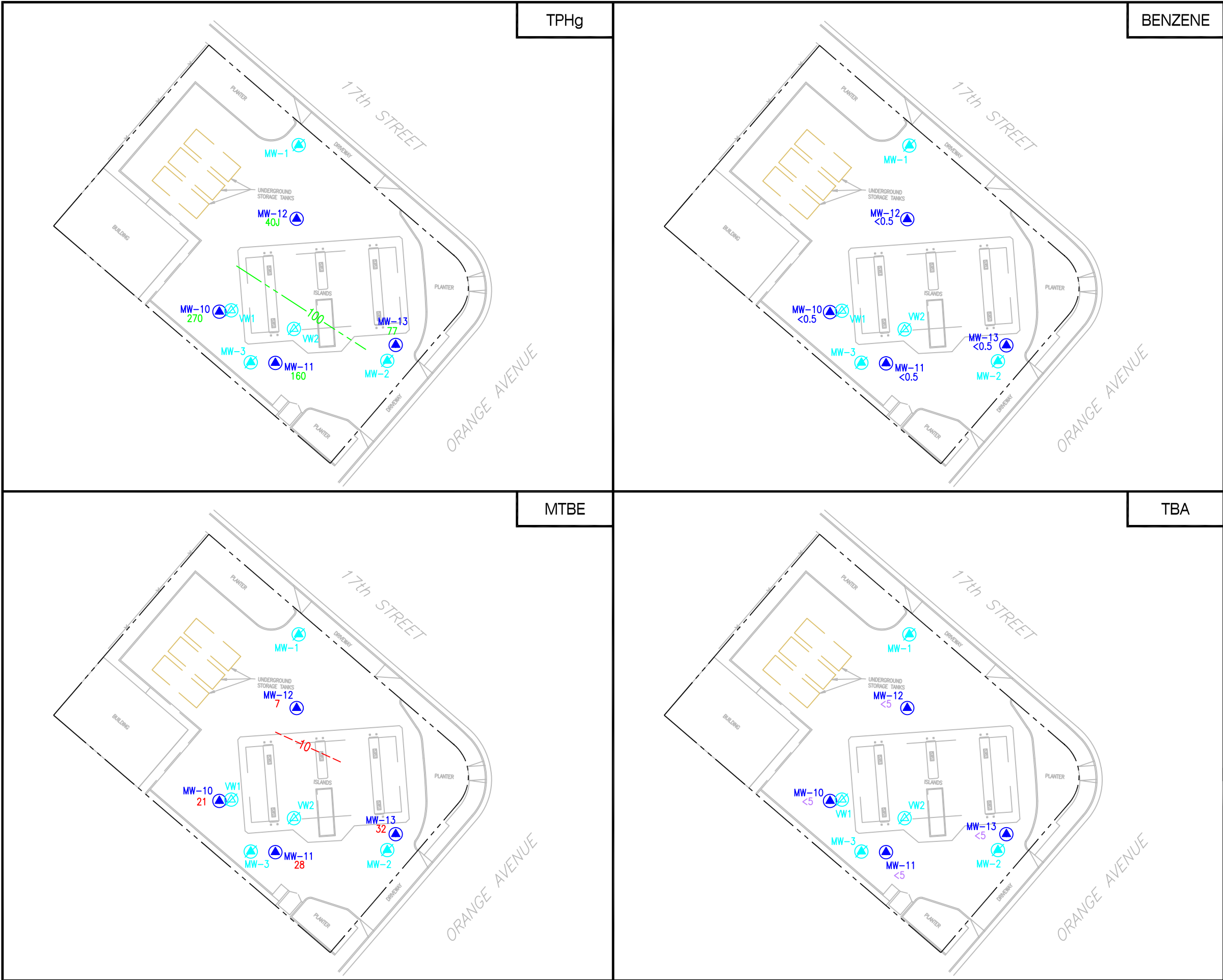
NOTE:  
ALL CONTOUR LINES ARE AN INTERPRETATION BASED ON THE RESULTS OF THE WELL GAUGING DATA FOR THIS QUARTER.



Chevron Environmental Management Company				
SERVICE STATION NO. 9-0819 195 EAST 17TH STREET COSTA MESA, CALIFORNIA				
GROUNDWATER CONTOUR MAP JANUARY 17, 2006				
drawn	HDS	checked	approved	PLATE NO.
date	02/06	date	date	<b>3</b>
job no.	06-6102-00-7460-070		file no.	
 <b>Science Applications International Corporation</b> From Science to Solutions™				



FILE: X:\Drafting\9-0819\2006 QTRLY\00819-CHEM061.dwg [Model]



**EXPLANATION**

- GROUNDWATER MONITORING WELL LOCATION
- DESTROYED BEI MONITORING WELL LOCATION
- DESTROYED BEI VENT WELL LOCATION

CONCENTRATION IN MICROGRAMS PER LITER (ug/L) FOR:

- <22 TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg)
- <0.5 BENZENE
- <0.5 METHYL TERTIARY-BUTYL ETHER (MTBE)
- <5 TERTIARY-BUTYL ALCOHOL (TBA)

ISOCONCENTRATION LINE (ug/L); QUERIED WHERE LOCATION IS CONJECTURAL FOR:

- TPHg
- MTBE

<50 NOT DETECTED ABOVE LABORATORY REPORTING LIMIT. NUMBER INDICATES LOWEST REPORTING LIMIT USING EPA METHODS 8015B OR 8260B.

J ESTIMATED VALUE BETWEEN THE METHOD DETECTION LIMIT (MDL) AND THE ESTIMATED QUANTITATION LIMIT (EQL).

Scale 0 20 40 feet

**Chevron Environmental Management Company**  
SERVICE STATION NO. 9-0819  
195 EAST 17TH STREET  
COSTA MESA, CALIFORNIA

DISSOLVED HYDROCARBON CONCENTRATION MAP  
FOR GROUNDWATER SAMPLES  
JANUARY 17, 2006

drawn	HDS	checked	approved	PLATE NO.
date	02/06	date	date	4
job no.	06-6102-00-7460-070			

file no. Q0819-CHEM061

**SAIC** Science Applications International Corporation  
From Science to Solutions™

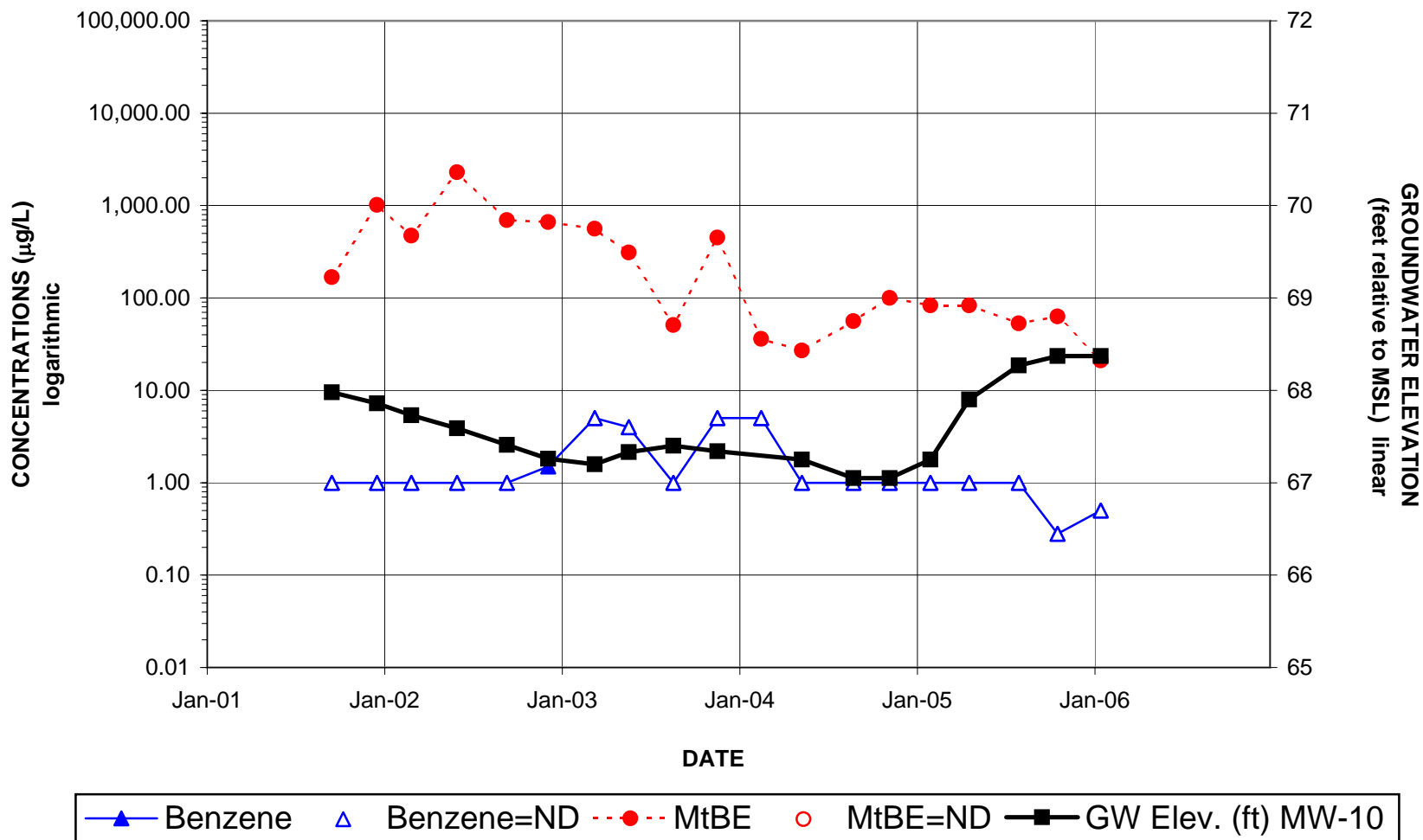


## **ATTACHMENT 5**

### **HYDROGRAPHS**

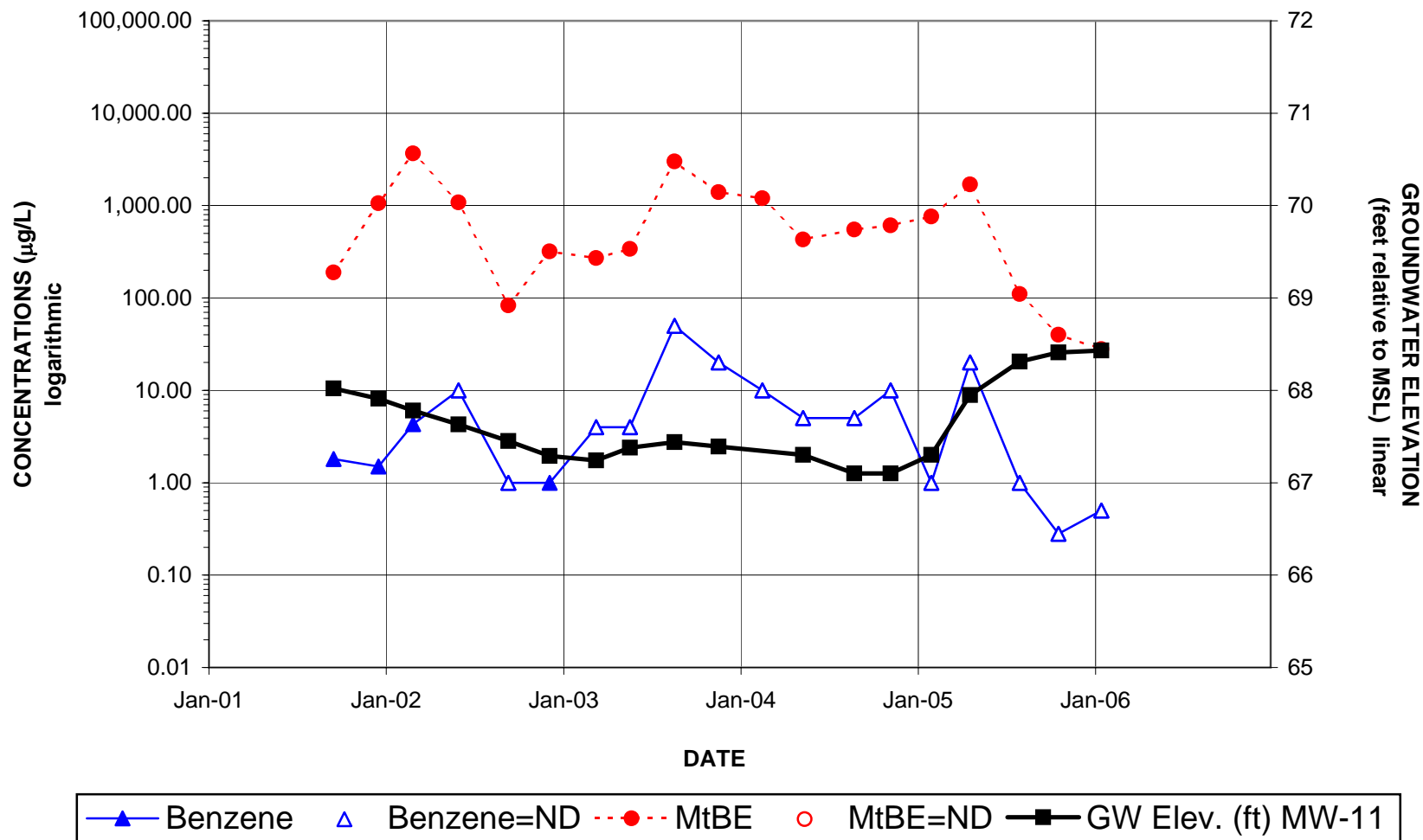
Chevron Environmental Management Company  
 Service Station No. 9-0819  
 195 E. 17th Street, Costa Mesa, California  
 Well MW-10

**BENZENE AND MTBE CONCENTRATIONS AND GROUNDWATER ELEVATION VS. TIME**



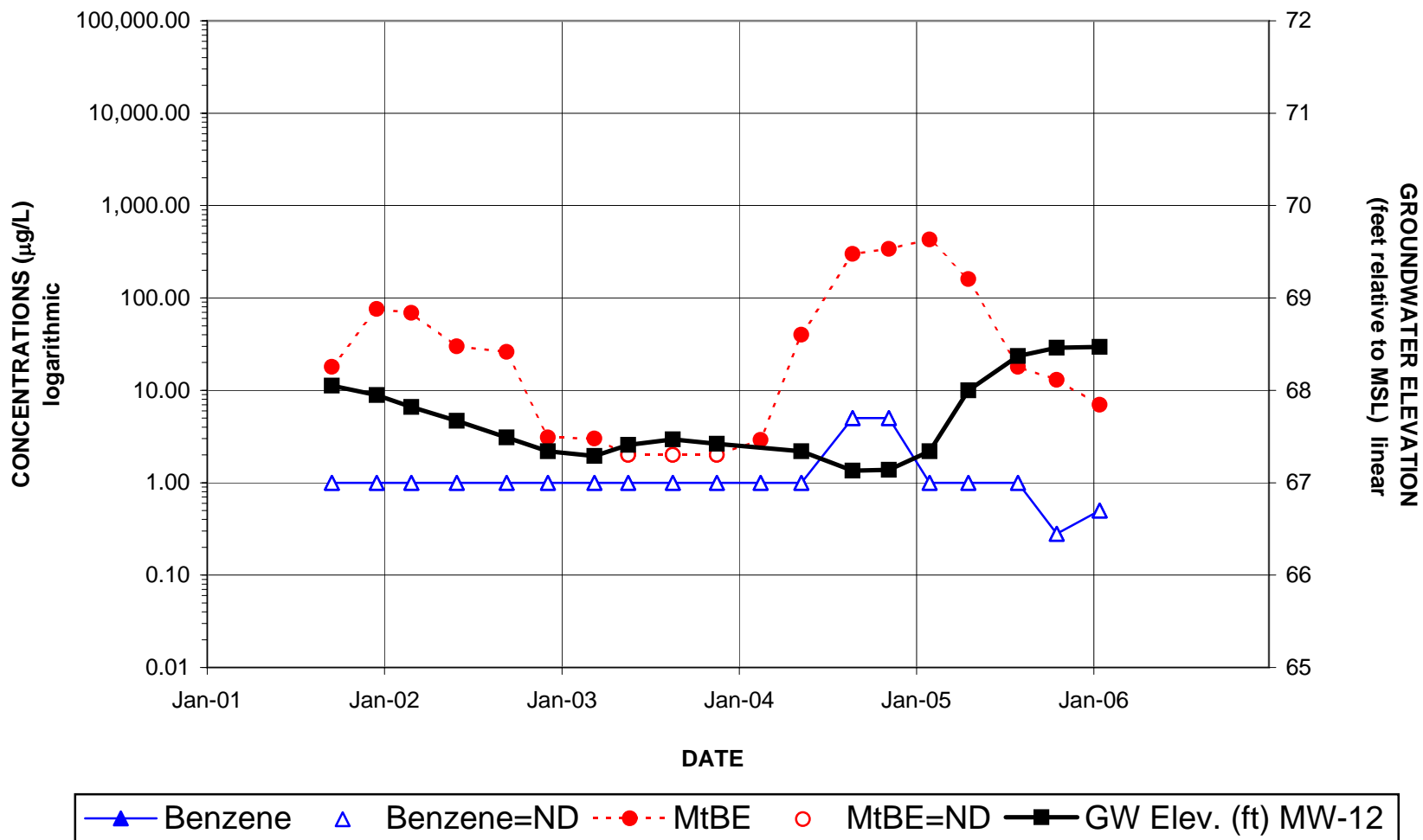
Chevron Environmental Management Company  
 Service Station No. 9-0819  
 195 E. 17th Street, Costa Mesa, California  
 Well MW-11

**BENZENE AND MTBE CONCENTRATIONS AND GROUNDWATER ELEVATION VS. TIME**



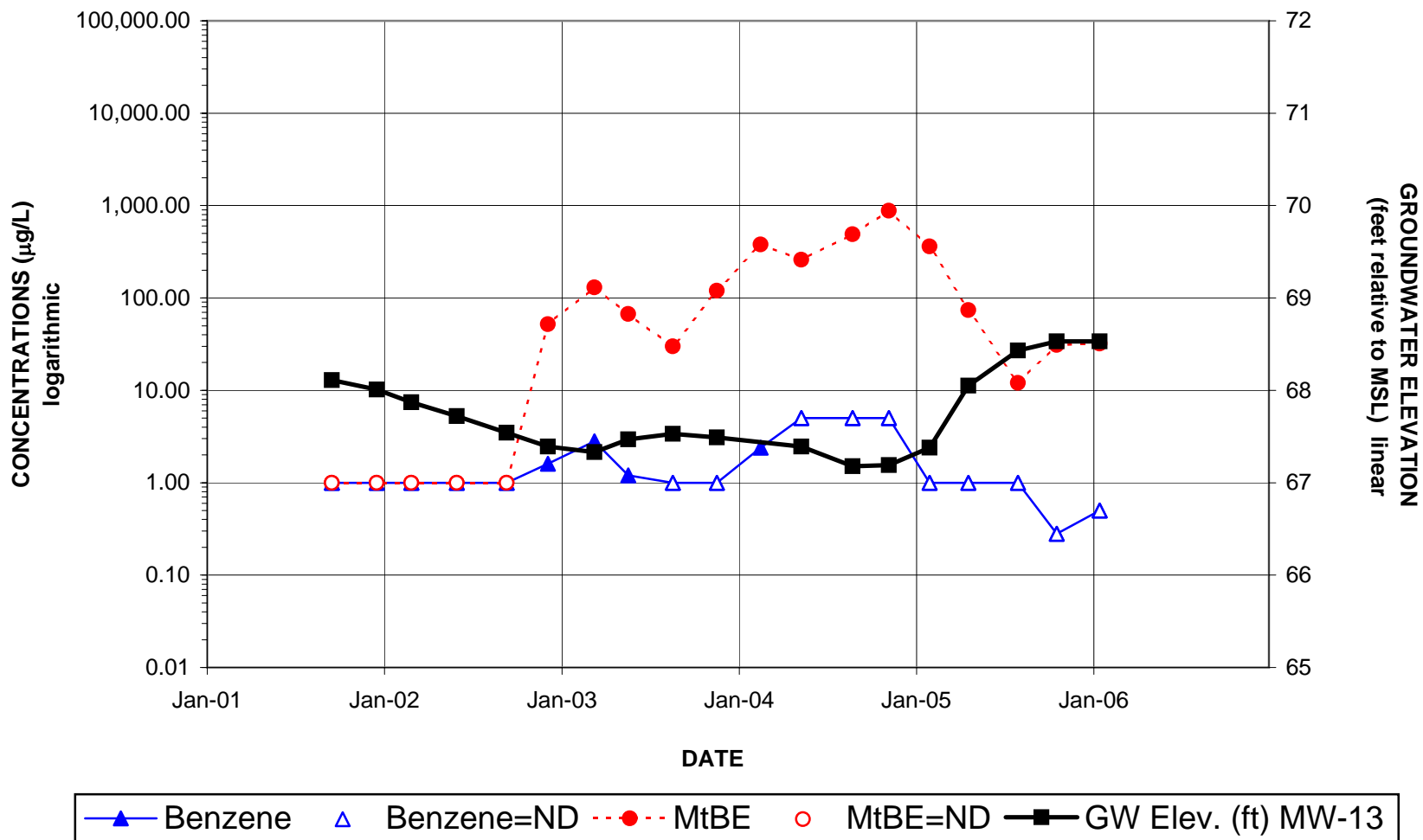
Chevron Environmental Management Company  
 Service Station No. 9-0819  
 195 E. 17th Street, Costa Mesa, California  
 Well MW-12

**BENZENE AND MTBE CONCENTRATIONS AND GROUNDWATER ELEVATION VS. TIME**



Chevron Environmental Management Company  
 Service Station No. 9-0819  
 195 E. 17th Street, Costa Mesa, California  
 Well MW-13

**BENZENE AND MTBE CONCENTRATIONS AND GROUNDWATER ELEVATION VS. TIME**



## **ATTACHMENT 6**

### **GROUNDWATER SAMPLING PROCEDURES AND FIELD SHEETS**



Wayne Perry, Inc.  
8281 Commonwealth Avenue Buena Park, California 90621 Phone (714) 826-0352 (800) 883-0352

January 20, 2006

Attention: Ms. Karen Simons  
Scientific Applications International Corporation  
570 W. Central Avenue, Suite A  
Brea, California 92821

Subject: Groundwater Monitoring First Quarter 2006  
Chevron Environmental Management Company Station 9-0819  
195 East 17<sup>th</sup> Street and Orange Street  
Costa Mesa, California  
WPI Project Number 01.902

Dear Ms. Simons:

Enclosed is a summary of groundwater monitoring activities performed by Wayne Perry, Inc at the Chevron Environmental Management Company Station 9-0819, located at 195 E 17<sup>th</sup> Street in the city of Costa Mesa. The contents of this field documentation packet include the following:

Groundwater Sampling Procedures and Field Sheets  
Chain of Custody Forms

Please contact Ms. Truedi Balsitis of Wayne Perry, Inc at (714) 826-0352 for questions regarding the sampling activities and procedures provided herein

Sincerely,

A handwritten signature in cursive script that reads "David M. Henry".

David M. Henry

California Professional Geologist 4085

A large, stylized handwritten flourish or loop that extends from the bottom of the signature area.

## **ATTACHMENTS**

Groundwater Sampling Procedures and Field Sheets  
Chain of Custody



## GROUNDWATER SAMPLING PROCEDURES

Before purging, each well was measured for depth of well, depth to water, and phase-separated hydrocarbon thickness. Groundwater depths were measured using an electronic water/hydrocarbon interface probe calibrated to one hundredth of a foot. The interface probe was washed in non-phosphate soap and triple rinsed in distilled water between wells.

Purged groundwater containing dissolved- or phase-separated petroleum hydrocarbons if present was evacuated with an air lift pump or bailer and placed in sealed DOT drums. Purged groundwater was bulked and transported to US Filters in Los Angeles for disposal.

Prior to sampling, wells were purged of water with a stainless steel or PVC bailer. Fast recharging wells were purged of three casing volumes of water. Slow recharging wells were purged until dry and allowed to recover for approximately two hours or until the well recovered 80 percent of the initial water column height before sampling. Each casing volume of water was field tested for temperature, conductivity, pH, turbidity, dissolved oxygen and oxygen reduction potential. The well sample of water was field tested for turbidity. Field testing data follows this page.

Water samples were obtained using a disposable bailer equipped with a bottom emptying device and placed in laboratory supplied 40 ml VOA vials with acid preservative. Samples were sealed, labeled, and placed on ice to reduce the potential for volatilization. In addition to samples from the wells, a trip blank was prepared to verify the integrity of the sampling and laboratory procedures.

Water samples were shipped to Lancaster Laboratories in Lancaster, Pennsylvania following appropriate chain-of-custody procedures. Groundwater samples were tested for total petroleum hydrocarbons-gasoline, benzene, toluene, ethylbenzene, xylenes, and oxygenates using EPA Test Method 8260B. Samples for sulfate, nitrates and ferrous iron analyses were also collected.



**CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY**  
Field Temperature, Conductivity, pH, Turbidity, and Dissolved Oxygen Data

Cross Street: 17th @ Orange

Project: 01-902

Date: 1-17-06

Well:	Casing Vol 1	Casing Vol 2	Casing Vol 3	Sample	Comments	
<b>Well: MW-12</b>						
Start Time	08:44	08:48	08:52	(25)		
Purged Water (gal)	8.06	8.06	8.06			
Temperature (°C)	22.1	22.3	22.4			
Conductivity (us/cm)	0.28	0.27	0.26			
pH	6.16	6.14	6.12		Begin purge time:	08:40
Turbidity (NTU)	190.0	196.0	204.0	30.0	End Sampling time:	11:20
Dissolved Oxygen (ppm)	1.98	2.10	2.13		Total time:	
Oxy. Reduct. Potent (mV)	43	36	33		Well recharge level:	31.81
<b>Well: MW-13</b>						
Start Time	09:08	09:12	09:16	(25)		
Purged Water (gal.)	8.13	8.13	8.13			
Temperature (°C)	20.5	22.2	22.3			
Conductivity (us/cm)	0.29	0.32	0.34			
pH	6.42	6.43	6.44		Begin purge time:	09:04
Turbidity (NTU)	322.0	323.0	324.0	26.0	End Sampling time:	11:36
Dissolved Oxygen (ppm)	2.81	2.54	2.51		Total time:	
Oxy. Reduct. Potent (mV)	-61	-79	-93		Well recharge level:	31.46
<b>Well: MW-10</b>						
Start Time	09:39	09:43	09:47	(22)		
Purged Water (gal.)	7.26	7.26	7.26			
Temperature (°C)	20.9	21.9	21.9			
Conductivity (us/cm)	0.28	0.29	0.29			
pH	6.40	6.45	6.47		Begin purge time:	09:36
Turbidity (NTU)	164.0	398.0	429.0	42.0	End Sampling time:	11:48
Dissolved Oxygen (ppm)	2.39	2.15	2.13		Total time:	
Oxy. Reduct. Potent (mV)	113	118	120		Well recharge level:	32.32
<b>Well: MW-11</b>						
Start Time	10:01	10:05	10:09	(24)		
Purged Water (gal.)	7.97	7.97	7.97			
Temperature (°C)	21.0	22.8	22.9			
Conductivity (us/cm)	0.29	0.30	0.30			
pH	6.61	6.63	6.65		Begin purge time:	09:57
Turbidity (NTU)	178.0	240.0	277.0	38.0	End Sampling time:	12:04
Dissolved Oxygen (ppm)	2.86	2.42	2.24		Total time:	
Oxy. Reduct. Potent (mV)	-25	-28	-31		Well recharge level:	31.80

Serial # of Meter: T910045  
42221

Model: Horiba

Completed By: Jong Lee

## WELL GAUGING/ SAMPLING CHECKLIST

<b>For:</b> <u>CHEVRON</u>	<b>Job Number:</b> <u>01-902</u>
<b>Location:</b> <u>195 E 17th St - Costa Mesa</u>	<b>Date:</b> <u>1-17-06</u>

### Task Check List

Well cap secure	Well cap locked
Well box cleaned and free of water	Well traffic lid secured

### Well Repairs (needed or made):


### Site Observations (appearance changes, condition of wells, etc.):


### Drums

Were drums present upon arrival? Yes <input type="checkbox"/> <u>No</u>	Were drums <u>used</u> and left onsite this visit? Yes <input type="checkbox"/> <u>No</u>
Generator Name:	Generator Name:
Date of Origin:	Date of Accumulation:
Contents:	Contents:
Water   Soil   Gasoline   Other	Water   Soil   Gasoline   Other
Drum Size:	Drum Size:
Number of drums:	Number of drums
Quantity of material (gallons):	Quantity of material (gallons):
Percentages of mixture:	Percentages of mixture:
Condition of drum(s):	Comments:

Technician: <u>Jorge G.</u>	Assistant:
-----------------------------	------------

## CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ■ 145 S. State College Boulevard ■ Brea, CA 92822-2292

COC 1 of 1

Chevron Site Global ID: T0605902237

Chevron Site Number: 9-0819

Chevron Site Address: 195 E. 17<sup>th</sup> Street

&amp; Orange - Costa Mesa

Chevron PM: Mike Bauer

Chevron PM Phone No.: (714) 671-3200

☒ Retail and Terminal Business Unit (RTBU) Job

Charge Code: NWRTB 0090819 -0-OML

NWRTB 00SITE NUMBER -0-WBS

(WBS ELEMENTS: SITE ASSMT: A1L/SITE

MONT.: OML/REMD. IMPL.: R5L/OP. MAINT. &amp; MON.: M1L)

☐ Construction/Retail Job

THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.

Chevron Consultant: SAIC

Address: 570 Central Ave., Suite A Brea

Consultant Contact: Karen Simons

Consultant Phone No.: (714) 257-6409

Consultant Project No.: 01.902

Sampling Company: Wayne Perry, Inc.

Sampled By (Print): Jorge Gonzalez

Sampler Signature: *Jorge Gonzalez*

Del Mar Analytical

☐ Irvine, CA☐ Colton, CA

Lab Contact: D. Wilson

Phone No:

☐ (949) 261-1022☐ (909) 370-4667

Lancaster Laboratories

☒ Lancaster, PA

Lab Contact:

Teresa

Cunningham

Phone No:

☒ (717) 656-2300

Other Lab

## ANALYSES REQUIRED

Special Instructions

Ferrous iron samples filtered in field.

Temp. Blank Check Time Temp.

17:04 0.2

Notes/Comments

## SAMPLE ID

Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	Container Type	# of Containers	Preservation	EPA 8015B TPH-G	TPH-D	HYDROCARBON SCREEN	EPA 8021B BTEX	MTBE	EPA 8260B TPH-G	BTEX	MTBE	OXYGENATES	HVOC	EPA 6010 Ca, Fe, K, Mg, Mn, Na	EPA 6010/7000 TITLE 22 METALS	TTLC	STLC	EPA 150 1 PH	SM 2510B SPECIFIC CONDUCTIVITY	EPA 418 1 TRPH	SULFATE/NITRATE & FERROUS IRON	EPA 413 1 OIL/GREASES
MW-10	W		06/01/17	11:48	40 ml vial	5	HCL						X												X	
MW-11	W		06/01/17	12:04	40 ml vial	5	HCL						X												X	
MW-12	W		06/01/17	11:20	40 ml vial	5	HCL						X												X	
MW-13	W		06/01/17	11:36	40 ml vial	5	HCL						X												X	
QA	T		06/01/17	11:00	40 ml vial	3	HCL						X													Trip Blank

Relinquished By: *Jorge Gonzalez* Company: Wayne Perry, Inc.

Date/Time: 1-17-06 @ 1705

Relinquished To: *Mendi Balats WP1* Company: *Handela Dynamics*Turnaround Time: 24 Hours Standard ☒ 48 hours OtherRelinquished By: *Mendi Balats WP1* Company: *Handela Dynamics*

Date/Time: 1/18/06

Relinquished To: *Handela Dynamics* Company: *Handela Dynamics*

Sample Integrity: (Check by lab on arrival)

Relinquished By: *Handela Dynamics* Company: *Handela Dynamics*

Date/Time:

Relinquished To: *Handela Dynamics* Company: *Handela Dynamics*

Intact: On Ice: Temp:

FEDEX # 8542 1027 9188

**ATTACHMENT 7**

**LABORATORY ANALYSES AND CHAIN OF CUSTODY FORMS**

## ANALYTICAL RESULTS

Prepared for:

Chevron  
145 S. State College Blvd  
PO Box 2292  
Brea CA 92822

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 974826. Samples arrived at the laboratory on Thursday, January 19, 2006. The PO# for this group is 0015006354 and the release number is BAUER.

<u>Client Description</u>		<u>Lancaster Labs Number</u>
MW-10-W-060117	NA Water	4690731
MW-11-W-060117	NA Water	4690732
MW-12-W-060117	NA Water	4690733
MW-13-W-060117	NA Water	4690734
QA-T-060117	NA Water	4690735

ELECTRONIC SAIC  
COPY TO  
ELECTRONIC SAIC  
COPY TO  
ELECTRONIC SAIC  
COPY TO  
ELECTRONIC SAIC  
COPY TO

Attn: Heather Andaya  
  
Attn: Loureen Gomez  
  
Attn: Daryl Pessler  
  
Attn: Sam Lacey

Questions? Contact your Client Services Representative  
Megan A Moeller at (717) 656-2300

Respectfully Submitted,



**Robin C. Runkle**  
**Senior Specialist**





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4690731

MW-10-W-060117 NA Water  
Facility# 90819 WPBP  
195 E 17th St-Costa Mesa T0605902237 MW-10

Collected: 01/17/2006 11:48 by JG

Account Number: 11908

Submitted: 01/19/2006 09:05  
Reported: 02/15/2006 at 13:47  
Discard: 03/18/2006

Chevron  
145 S. State College Blvd  
PO Box 2292  
Brea CA 92822

MES10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
00228	Sulfate	14808-79-8	261,000.	15,000.	50,000.	ug/l	50
00368	Nitrate Nitrogen	14797-55-8	2,200.	400.	500.	ug/l	5
08344	Ferrous Iron	n.a.	15. J	8.0	100.	ug/l	1
00055	TPH GRO in water by 8260B						
00057	C4-C12-TPH-GRO	n.a.	270.	22.	50.	ug/l	1
06056	BTEX+5 Oxygenates by 8260B						
02010	Methyl Tertiary Butyl Ether	1634-04-4	21.	0.5	4.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	4.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	4.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	4.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	20.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	4.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	4.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	4.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	4.	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00228	Sulfate	EPA 300.0	1	01/19/2006 16:09	William L Hamaker Jr	50
00368	Nitrate Nitrogen	EPA 300.0	1	01/19/2006 11:02	William L Hamaker Jr	5
08344	Ferrous Iron	SM18 3500-Fe D modified	1	01/20/2006 04:00	Daniel S Smith	1
00055	TPH GRO in water by 8260B	SW-846 8260B	1	01/26/2006 16:19	Ginelle L Feister	1
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	01/26/2006 16:19	Ginelle L Feister	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/26/2006 16:19	Ginelle L Feister	1

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4690732

MW-11-W-060117 NA Water  
Facility# 90819 WPBP  
195 E 17th St-Costa Mesa T0605902237 MW-11

Collected: 01/17/2006 12:04 by JG

Account Number: 11908

Submitted: 01/19/2006 09:05  
Reported: 02/15/2006 at 13:47  
Discard: 03/18/2006

Chevron  
145 S. State College Blvd  
PO Box 2292  
Brea CA 92822

MES11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
00228	Sulfate	14808-79-8	281,000.	15,000.	50,000.	ug/l	50
00368	Nitrate Nitrogen	14797-55-8	N.D.	400.	500.	ug/l	5
08344	Ferrous Iron	n.a.	15. J	8.0	100.	ug/l	1
00055	TPH GRO in water by 8260B						
00057	C4-C12-TPH-GRO	n.a.	160.	22.	50.	ug/l	1
06056	BTEX+5 Oxygenates by 8260B						
02010	Methyl Tertiary Butyl Ether	1634-04-4	28.	0.5	4.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	4.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	4.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	4.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	20.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	4.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	4.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	4.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	4.	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00228	Sulfate	EPA 300.0	1	01/19/2006 16:24	William L Hamaker Jr	50
00368	Nitrate Nitrogen	EPA 300.0	1	01/19/2006 11:17	William L Hamaker Jr	5
08344	Ferrous Iron	SM18 3500-Fe D modified	1	01/20/2006 04:00	Daniel S Smith	1
00055	TPH GRO in water by 8260B	SW-846 8260B	1	01/26/2006 16:43	Ginelle L Feister	1
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	01/26/2006 16:43	Ginelle L Feister	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/26/2006 16:43	Ginelle L Feister	1

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4690733

MW-12-W-060117 NA Water  
Facility# 90819 WPBP  
195 E 17th St-Costa Mesa T0605902237 MW-12

Collected: 01/17/2006 11:20 by JG

Account Number: 11908

Submitted: 01/19/2006 09:05  
Reported: 02/15/2006 at 13:47  
Discard: 03/18/2006

Chevron  
145 S. State College Blvd  
PO Box 2292  
Brea CA 92822

MES12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
00228	Sulfate	14808-79-8	231,000.	7,500.	25,000.	ug/l	25
00368	Nitrate Nitrogen	14797-55-8	2,600.	400.	500.	ug/l	5
08344	Ferrous Iron	n.a.	9.8 J	8.0	100.	ug/l	1
00055	TPH GRO in water by 8260B						
00057	C4-C12-TPH-GRO	n.a.	40. J	22.	50.	ug/l	1
06056	BTEX+5 Oxygenates by 8260B						
02010	Methyl Tertiary Butyl Ether	1634-04-4	7.	0.5	4.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	4.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	4.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	4.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	20.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	4.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	4.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	4.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	4.	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00228	Sulfate	EPA 300.0	1	01/19/2006 16:38	William L Hamaker Jr	25
00368	Nitrate Nitrogen	EPA 300.0	1	01/19/2006 10:33	William L Hamaker Jr	5
08344	Ferrous Iron	SM18 3500-Fe D modified	1	01/20/2006 04:00	Daniel S Smith	1
00055	TPH GRO in water by 8260B	SW-846 8260B	1	01/26/2006 17:07	Ginelle L Feister	1
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	01/26/2006 17:07	Ginelle L Feister	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/26/2006 17:07	Ginelle L Feister	1

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4690734

MW-13-W-060117 NA Water  
Facility# 90819 WPBP  
195 E 17th St-Costa Mesa T0605902237 MW-13

Collected: 01/17/2006 11:36 by JG

Account Number: 11908

Submitted: 01/19/2006 09:05  
Reported: 02/15/2006 at 13:47  
Discard: 03/18/2006

Chevron  
145 S. State College Blvd  
PO Box 2292  
Brea CA 92822

MES13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
00228	Sulfate	14808-79-8	303,000.	15,000.	50,000.	ug/l	50
00368	Nitrate Nitrogen	14797-55-8	460. J	400.	500.	ug/l	5
08344	Ferrous Iron	n.a.	95. J	8.0	100.	ug/l	1
00055	TPH GRO in water by 8260B						
00057	C4-C12-TPH-GRO	n.a.	77.	22.	50.	ug/l	1
06056	BTEX+5 Oxygenates by 8260B						
02010	Methyl Tertiary Butyl Ether	1634-04-4	32.	0.5	4.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	4.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	4.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	4.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	20.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	4.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	4.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	4.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	4.	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00228	Sulfate	EPA 300.0	1	01/19/2006 16:53	William L Hamaker Jr	50
00368	Nitrate Nitrogen	EPA 300.0	1	01/19/2006 10:48	William L Hamaker Jr	5
08344	Ferrous Iron	SM18 3500-Fe D modified	1	01/20/2006 04:00	Daniel S Smith	1
00055	TPH GRO in water by 8260B	SW-846 8260B	1	01/26/2006 17:31	Ginelle L Feister	1
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	01/26/2006 17:31	Ginelle L Feister	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/26/2006 17:31	Ginelle L Feister	1

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4690735

QA-T-060117 NA Water  
Facility# 90819 WPBP  
195 E 17th St-Costa Mesa T0605902237 QA

Collected: 01/17/2006 11:00

Account Number: 11908

Submitted: 01/19/2006 09:05  
Reported: 02/15/2006 at 13:47  
Discard: 03/18/2006

Chevron  
145 S. State College Blvd  
PO Box 2292  
Brea CA 92822

MESTB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
00055	TPH GRO in water by 8260B						
00057	C4-C12-TPH-GRO	n.a.	N.D.	22.	50.	ug/l	1
06056	BTEX+5 Oxygenates by 8260B						
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	4.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	4.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	4.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	4.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	20.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	4.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	4.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	4.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	4.	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00055	TPH GRO in water by 8260B	SW-846 8260B	1	01/26/2006 17:55	Ginelle L Feister	1
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	01/26/2006 17:55	Ginelle L Feister	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/26/2006 17:55	Ginelle L Feister	1

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: Chevron

Group Number: 974826

Reported: 02/15/06 at 01:47 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

## Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 06019621101A	Sample number(s): 4690731-4690734								
Sulfate	N.D.	0.30	1.0	mg/l	99		90-110		
Nitrate Nitrogen	N.D.	0.080	0.10	mg/l	96		90-110		
Batch number: 06020834401A	Sample number(s): 4690731-4690734								
Ferrous Iron	N.D.	0.0080	0.10	mg/l	98		95-105		
Batch number: Z060262AA	Sample number(s): 4690731-4690735								
C4-C12-TPH-GRO	N.D.	22.	50.	ug/l	93	93	70-130	0	30
Methyl Tertiary Butyl Ether	N.D.	0.5	4.	ug/l	103	103	77-127	0	30
di-Isopropyl ether	N.D.	0.5	4.	ug/l	96	95	67-130	1	30
Ethyl t-butyl ether	N.D.	0.5	4.	ug/l	98	98	74-120	0	30
t-Amyl methyl ether	N.D.	0.5	4.	ug/l	100	100	79-113	0	30
t-Butyl alcohol	N.D.	5.	20.	ug/l	99	95	60-133	4	30
Benzene	N.D.	0.5	4.	ug/l	102	100	85-117	2	30
Toluene	N.D.	0.5	4.	ug/l	106	106	85-115	0	30
Ethylbenzene	N.D.	0.5	4.	ug/l	106	106	82-119	0	30
Xylene (Total)	N.D.	0.5	4.	ug/l	109	108	83-113	1	30

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

	MS	MSD	MS/MSD	RPD	BKG	DUP	DUP	Dup	
Analysis Name	%REC	%REC	Limits	RPD	MAX	Conc	Conc	RPD	Max
Batch number: 06019621101A	Sample number(s): 4690731-4690734 UNSPK: P690671 BKG: P690671								
Sulfate	100		90-110			37.5	37.1	1	3
Nitrate Nitrogen	97		90-110			0.44 J	N.D.	200* (1)	2
Batch number: 06020834401A	Sample number(s): 4690731-4690734 UNSPK: P690818 BKG: P690818								
Ferrous Iron	98	99	80-114	0	5	4.6	4.9	5 (1)	8
Batch number: Z060262AA	Sample number(s): 4690731-4690735 UNSPK: P690040								
Methyl Tertiary Butyl Ether	103		69-134						
di-Isopropyl ether	96		75-130						
Ethyl t-butyl ether	97		78-119						
t-Amyl methyl ether	101		72-125						
t-Butyl alcohol	76		56-134						
Benzene	107		83-128						
Toluene	112		83-127						
Ethylbenzene	112		82-129						
Xylene (Total)	114		82-130						

\*- Outside of specification

\*\*-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The background result was more than four times the spike added.

## Quality Control Summary

Client Name: Chevron  
Reported: 02/15/06 at 01:47 PM

Group Number: 974826

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX+5 Oxygenates by 8260B

Batch number: Z060262AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4690731	102	94	103	103
4690732	102	94	105	99
4690733	104	95	104	98
4690734	104	95	106	99
4690735	105	96	103	97
Blank	101	94	106	98
LCS	101	95	105	101
LCSD	100	97	106	102
MS	102	96	104	102
Limits:	80-116	77-113	80-113	78-113

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Account# 11908 Group# 974826

## CHAIN OF CUSTODY FORM

Sample# 4690731 -35

Chevron Environmental Management Company ■ 145 S. State College Boulevard ■ Brea, CA 92822-2292

COC 1 of 1

Chevron Site Global ID: T0605902237

Chevron Site Number: 9-0819

Chevron Site Address: 195 E. 17<sup>th</sup> Street

&amp; Orange - Costa Mesa

Chevron PM: Mike Bauer

Chevron PM Phone No.: (714) 671-3200

☒ Retail and Terminal Business Unit (RTBU) Job

Charge Code: NWRBTB 0090819 -0-OML

NWRBTB 00SITE NUMBER -0-WBS

(WBS ELEMENTS: SITE ASSMT: A1L/SITE

MONT.: OML/REMD. IMPL.: R5L/OP. MAINT. &amp; MON.: M1L)

☐ Construction/Retail Job

THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.

Chevron Consultant: SAIC

Address: 570 Central Ave., Suite A Brea

Consultant Contact: Karen Simons

Consultant Phone No. (714) 257-6409

Consultant Project No. 01.902

Sampling Company: Wayne Perry, Inc.

Sampled By (Print): Jorge Gonzalez

Sampler Signature: [Signature]

Del Mar Analytical

☐ Irvine, CA  
☐ Colton, CA  
 Lab Contact: D. Wilson  
 Phone No:  
☐ (949) 261-1022  
☐ (909) 370-4667

Lancaster Laboratories

☒ Lancaster, PA  
 Lab Contact:  
 Teresa Cunningham  
 Phone No:  
☒ (717) 656-2300

Other Lab

## ANALYSES REQUIRED

Special Instructions

Ferrous iron samples filtered in field.

Temp. Blank Check Time Temp.

17:04 0.2

Notes/Comments

## SAMPLE ID

Field Point Name	Matrix	Top Depth	Date (yy/mm/dd)	Sample Time	Container Type	# of Containers	Preservation	EPA 8015B TPH-G	TPH-D	HYDROCARBON SCREEN	EPA 8021B BTEX	MTBE	EPA 8260B TPH-G	BTEX	MTBE	OXYGENATES	HVOC	EPA 6010 CA, FE, K, MG, MN, NA	EPA 6010/7000 TITLE 22 METALS	TITLE	STLC	EPA 150.1 PH	SM 2510B SPECIFIC CONDUCTIVITY	EPA 418.1 TRPH	SULFATE/NITRATE & FERROUS IRON		
MW-10	W		06/01/17	11:48	40 ml vial	5	HCL						X												X		
MW-11	W		06/01/17	12:04	40 ml vial	5	HCL						X												X		
MW-12	W		06/01/17	11:20	40 ml vial	5	HCL						X												X		
MW-13	W		06/01/17	11:36	40 ml vial	5	HCL						X												X		
QA	T		06/01/17	11:00	40 ml vial	3	HCL						X														Trip Blank

Relinquished By [Signature] Company Wayne Perry, Inc.

Date/Time: 1-17-06 @ 1705

Relinquished To [Signature] Company

Date/Time: 1/17/06 @ 1705

Turnaround Time: 24 Hours Standard ☒ X

48 hours Other

Relinquished By [Signature] Company

Date/Time: 1/18/06

Relinquished To [Signature] Company

Date/Time: 1/18/06

Sample Integrity: (Check by lab on arrival)

Relinquished By [Signature] Company

Date/Time: 1-19-06

Relinquished To [Signature] Company

Date/Time: 1-19-06

Intact: ☒ On Ice: ☒ Temp: 2.0

FEDEX # 8542 1027 9188



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>N.D.</b>	none detected	<b>BMQL</b>	Below Minimum Quantitation Level
<b>TNTC</b>	Too Numerous To Count	<b>MPN</b>	Most Probable Number
<b>IU</b>	International Units	<b>CP Units</b>	cobalt-chloroplatinate units
<b>umhos/cm</b>	micromhos/cm	<b>NTU</b>	nephelometric turbidity units
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>ug</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>ml</b>	milliliter(s)	<b>l</b>	liter(s)
<b>m3</b>	cubic meter(s)	<b>ul</b>	microliter(s)
<b>&lt;</b>	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>J</b>	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

## U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
<b>A</b>	TIC is a possible aldol-condensation product	<b>B</b>	Value is $<$ CRDL, but $\geq$ IDL
<b>B</b>	Analyte was also detected in the blank	<b>E</b>	Estimated due to interference
<b>C</b>	Pesticide result confirmed by GC/MS	<b>M</b>	Duplicate injection precision not met
<b>D</b>	Compound quantitated on a diluted sample	<b>N</b>	Spike sample not within control limits
<b>E</b>	Concentration exceeds the calibration range of the instrument	<b>S</b>	Method of standard additions (MSA) used for calculation
<b>N</b>	Presumptive evidence of a compound (TICs only)	<b>U</b>	Compound was not detected
<b>P</b>	Concentration difference between primary and confirmation columns $>25\%$	<b>W</b>	Post digestion spike out of control limits
<b>U</b>	Compound was not detected	<b>*</b>	Duplicate analysis not within control limits
<b>X,Y,Z</b>	Defined in case narrative	<b>+</b>	Correlation coefficient for MSA $<0.995$

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.

**ATTACHMENT 8**  
**DISPOSAL RECORDS**



No. 032952

## NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

CHEVRON PRODUCTS CO. CHEVRON  
NAME ~~TEXACO DOMESTIC ALL-PURPOSE OIL~~ ~~TEXACO~~ ~~9/5~~ # 9-0819 NWRTB-0090819-0  
ADDRESS P.O. BOX 5004 195 E. 17TH ST.  
CITY STATE ZIP SAN RAMON, CA 94583 COSTA MESA, CA  
ATTN: KATHY NORRIS L2173  
CONTAINERS: No 111 VOLUME 16 gal. WEIGHT  
TYPE: ☒ TANK TRUCK ☐ DUMP TRUCKS ☐ DRUMS ☐ CARTONS ☐ OTHER  
WASTE DESCRIPTION GROUNDWATER GENERATING PROCESS  
COMPONENTS OF WASTE PPM % COMPONENTS OF WASTE PPM %  
1 WATER 99-100%  
2 T.P.H. 0-1%  
3  
4  
PROPERTIES: pH ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER  
HANDLING INSTRUCTIONS: Wear proper personal protective gear when handling material.  
T. BALSUIS / WP 24 HR. EMERGENCY RESPONSE # 800-567-7455 M. BAUER / CHEVRON  
THIS GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS  
JEANNINE DUNCAN  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TRANSPORTER

NAME PHILIP WEST INDUSTRIAL SERVICES CORP., INC. EPA I.D. NO. CAR 000146837  
ADDRESS 1661 E. 32ND STREET  
CITY STATE ZIP LONG BEACH, CA 90806  
PHONE NO. 562 997-5080  
JOB NO. 672133  
PICK UP DATE 12-12-96  
TRUCK, UNIT, I.D. NO. ~~111~~  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

NAME U.S. FILTER RECOVERY SERVICES EPA I.D. NO. CAD 097030993  
ADDRESS 5375 S. BOYLE AVE.  
CITY STATE ZIP LOS ANGELES, CA 90058  
PHONE NO. 323 277-1450  
DISPOSAL METHOD  
☐ LANDFILL ☐ OTHER  
Profile # P154047  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE  
GEN OLD/NEW L A TONS  
TRANS S B  
C/Q RT/CD HWDF NONE DISCREPANCY

GENERATOR